

ESDEC, INC. TEST REPORT

SCOPE OF WORK UL 441 TESTING ON ECOFASTEN'S ROCKIT FLASHLESS SLIDE

REPORT NUMBER

104797494LAX-002

ISSUE DATE REVISED 21-OCTOBER-2021 10-NOVEMBER-2021

PAGES

6

DOCUMENT CONTROL NUMBER

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SUMMARY REPORT

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10-NOVEMBER-2021

Intertek Report No.: 104797494LAX-002 Intertek Project No.: G104797494

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Yann Schwarz ESDEC, Inc. 28357 Industrial Blvd. Hayward, CA 94545 Email: yann.schwarz@esdec.com

Subject: Project Summary of the Rain Testing per UL 441 on Ecofasten's Rockit Flashless Slide

Dear Mr. Yann Schwarz

Intertek was contracted by ESDEC, Inc. to perform testing in general accordance with UL 441 on Ecofasten's Rockit Flashless Slide photovoltaic (PV) module roof attachment. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at ESDEC's test facility at 28357 Industrial BLVD, Hayward, CA 94545.

This letter report represents the summary of our evaluation of the above referenced product(s).

UL 441, Safety for Gas Vents, Section 27: Rain Test

This letter report does not constitute certification of this product or any opinion or endorsement by this laboratory. If there are any questions regarding the results contained in this report, or any of the other services offered by Intertek, please do not hesitate to contact your dedicated Intertek Project Manager.

Completed by:	Deep Vora	Reviewed by:	Samantha Doshi	
Title:	Project Engineer	Title:	Team Lead - Solar	
Signature:	Leek ora	Signature	James Ho Bashi	
Date	November 10, 2021	Date:	November 10, 2021	

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SECTION 1 MATERIAL SOURCE/INSTALLATION

The test specimen was provided by the client. The specimen was installed onto a Spruce-Pine-Fir wood deck. The test deck measured 3' wide by 3' high and was constructed of #2 Spruce Pine Fir nominal 2x4 lumber. No center rafter was used in test deck since test specimen was tested in a deck mount only configuration. Test specimen was mounted to center of test deck. A sheet of nominal 7/16" thick plywood was secured to the studs with #8 x 1-5/8" roofing screws. The test deck was then covered with #15 felt paper and threetab asphalt shingles.

Description/Installation (Ecofasten Rockit Flashless Slide): The test specimen was composed of a 4" x 7" x 3" high extruded aluminum roof attachment with EPDM Foam pad and flexible flashing. The roof attachment was secured with Qty 8 - #12 - 3" deck screws with EPDM bonded washers through the mount and into the center of the test deck. No center rafter was used.

Rockit Flashless Slide Part numbers covered by this test report are as follows:

Part Number	Description
40-00034	Rockit Flashless Slide
10-00004	Rockit Flashless EPDM Foam Pad
90-0002	Rockit Flashless Flexible Flashing
30-00041	Screw # 12x3in
30-00042	Washer, Sealing # 12

SECTION 3

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Jae Hendrickson	ESDEC, Inc.

SECTION 4

TEST RESULTS

The temperature during testing was 23°C (71°F) and the humidity was 55%. The results are tabulated as follows:

Test Specimen #1 (Ecofasten Rockit Flashless Slide):

TITLE OF TEST	RESULTS	ALLOWED	NOTE
Water Penetration,	Pass	No leakage	1, 2
Per UL 441 - One hour of water spray			

General Note: All testing was performed in accordance with the referenced standard(s).

Note 1: Tested at 2/12 pitch

Note 2: Test results are applicable for roofs having a slope of 2:12 or greater Note 3: Test results are applicable for both deck and rafter mounting configurations



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SECTION 5 PHOTOGRAPHS

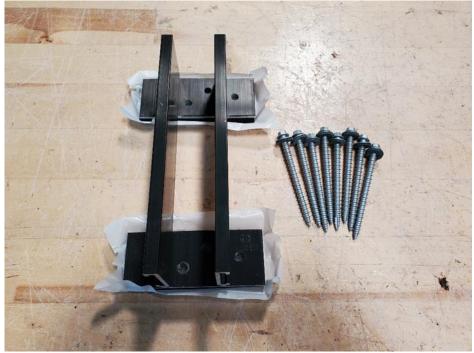


Photo No. 1 Unassembled Test Specimen (including 8 screws, 1 flashless slide assembly)



Photo No. 2 Test Specimen Under Test



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Photo No. 3 Test Specimen After Test



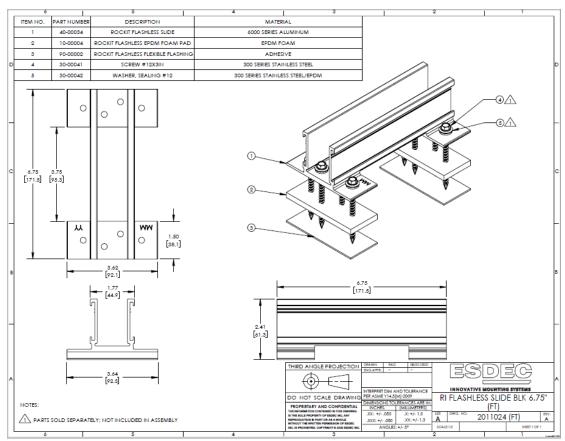
Photo No. 4 Underside of Test Desk After Test – no visible water penetration



SUMMARY REPORT

SECTION 6 DRAWINGS

The test specimen drawings have been reviewed by Intertek and are representative of the test specimen(s) reported herein. Any deviations are documented herein or on the drawings.



Drawing No. 1 Ecofasten Rockit Flashless Slide Assembly